

Surface Grinding Machine

HGS – 64,84

OPERATOR'S MANUAL



2376

CONTENTS

1. Summary	4
1.1 Construction	5
1.1.1 Construction of HGS-64, 84	5
1.2 Specification	6
1.3 Accessories	7
1.3.1 Standard Accessories	7
1.3.2 Special Accessories	7
1.4 Main Dimensions	8
1.4.1 HGS-64	8
1.4.1 HGS-84	9
2. Haulage and Installation	10
2.1 Haulage	10
2.2 Installation	11
2.2.1 Installation Place	11
2.2.2 Installation of the Machine HGS-64, 84	12
2.3 Cleaning of the Machine	15
2.4 Connection of Power Supply	15
2.5 Levelling of the Machine	17
2.6 Oil supply and Lubrication	19
2.6.1 Oil supply	19
2.6.2 Lubrication	21

3.	Trial Running	-----	23
3.1	Checking Items before Grinding Operation	-----	23
3.2	Trial Running	-----	26
4.	Operation of the Machine	-----	29
4.1	Running Operation	-----	29
4.1.1	Operation and Name of Control Panel	-----	29
4.1.2	Hydraulic Pressure Control Panel	-----	31
4.1.3	Table Longitudinal Feed Control	-----	32
4.1.4	Vertical Feed Control	-----	35
4.1.5	Cross Feed Control	-----	39
4.2	Handling of the Grinding Wheel	-----	42
4.3	Balancing of the Grinding Wheel	-----	43
4.4	Grinding Wheel and Flange	-----	47
4.4.1	Mounting of the Grinding Wheel	-----	47
4.4.2	Dismounting of the Grinding Wheel	-----	48
4.5	Dimensions of the Grinding Wheel	-----	49
4.6	Maximum Revolution Speed of the Grinding Wheel	-----	50
4.7	Dressing of the Grinding Wheel	-----	50
5.	Grinding Method	-----	53
5.1	Automatic Sizing Position Grinding	-----	53
5.1.1	Plunge Sizing Position Grinding	-----	54
5.1.2	Traverse Grinding	-----	55
5.2	Notice for the Grinding	-----	57

6.	Maintenance -----	59
6.1	The General for the Maintenance -----	59
6.2	Hydraulic Pressure Relations -----	60
6.2.1	Hydraulic Oil -----	60
6.2.2	Hydraulic Pressure -----	60
6.2.3	For the Lubrication -----	62
6.2.4	Hydraulic Circuit Diagram -----	63
6.3	Electric Circuit Diagram -----	64
6.3.1	HGS-64,84 Development Connection Diagram(1) -----	64
6.3.2	HGS-64,84 Development Connection Diagram(2) -----	65
6.3.3	HGS-64,84 Development Connection Diagram(3) -----	66
6.3.4	HGS-64,84 Magnetic Chuck Electric Circuit Diagram ---	67
6.3.5	HGS-64,84 Mutual Connection Diagram -----	68
6.3.6	Mutual Connection Diagram of the HGS-64,84Control Box-	69
6.3.7	HGS-64,84 Mutual Connection Diagram -----	70
6.4	Trouble Shooting -----	71
7.	Additional Data -----	75
7.1	Option Table for the Grinding Wheel of the Surface Grinding Machine -----	75
7.2	Allowance for Grinding -----	76
7.3	Diamond Tool -----	77